

AMENDMENTS TO THE CLAIMS

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Claim 1. (Currently Amended) A charge characteristic compensating circuit for a liquid crystal display panel including a plurality of liquid crystal cells arranged at each intersection between data lines and gate lines to control a light transmissivity in response to data signals from the data lines, and a plurality of switching devices for switching the data signals to be applied from the data lines to the liquid crystal cells in response to signals on the gate lines, the circuit comprising:

a voltage supply for generating a gate voltage required for the gate lines;

a gate line driver for applying the gate voltage from the voltage supply to the gate lines to drive the gate lines; and

a current controller including a resistor and a thermistor for responding to a change in the ambient temperature to change an amount of current of the gate voltage to be applied from the voltage supply to the gate line driver, thereby changing a width of a current path from the data line to the liquid crystal cell.

Claim 2. (Previously Presented) The charge characteristic compensating circuit as claimed in claim 1, wherein said resistor

and said thermistor are connected, in parallel, between the voltage supply and the gate line driver.

Claim 3. (Previously Presented) The charge characteristic compensating circuit as claimed in claim 1, wherein said resistor and said thermistor are connected, in series, between the voltage supply and the gate line driver.

Claim 4. (Original) The charge characteristic compensating circuit as claimed in claim 2, wherein the thermistor is a positive temperature coefficient thermistor.

Claim 5. (Original) The charge characteristic compensating circuit as claimed in claim 3, wherein the thermistor is a positive temperature coefficient thermistor.

Claim 6. (Currently Amended) A charge characteristic compensating circuit for a liquid crystal display panel including a plurality of liquid crystal cells arranged at each intersection between data lines and gate lines to control a light transmissivity in response to data signals from the data lines, and a plurality of switching devices for switching the data signals to be applied from

the data lines to the liquid crystal cells in response to signals on the gate lines, the circuit, comprising:

a voltage supply for generating a gate voltage required for the gate lines;

a gate line driver for applying the gate voltage from the voltage supply to the gate lines to drive the gate lines; and

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a current controller including a resistor and a thermistor for responding to a change in the ambient temperature to change a voltage level of the gate voltage to be applied from the voltage supply to the gate line driver, thereby changing a width of a current path from the data line to the liquid crystal cell.

Claim 7. (Previously Presented) The charge characteristic compensating circuit as claimed in claim 6, wherein the current controller includes a resistive voltage divider connected between the voltage supply and the gate line driver and composed of said resistor and said thermistor.

Claim 8. (Original) The charge characteristic compensating circuit as claimed in claim 6, wherein the thermistor is a negative temperature coefficient thermistor.

Claim 9. (Currently Amended) A charge characteristic compensating circuit for a liquid crystal display panel (LCD), comprising:

a voltage converter generating a high level gate voltage;

a gate line controller including a resistor and a thermistor for receiving said high level gate voltage from said voltage converter and supplying a controlling signal that varies as an ambient temperature varies; and

a gate line driver receiving said controlling signal from said gate line controller and ~~driving a gate line~~ supplying a predetermined voltage to a gate line according to the controlling signal to drive the gate line.

Claim 10. (Original) The charge characteristic compensating circuit of claim 9, wherein said gate line controller is a current controller such that said controlling signal received by said gate line driver includes an electrical current, an amount of which varies as said ambient temperature varies.

Claim 11. (Original) The charge characteristic compensating circuit of claim 10, wherein said current controller decreases said amount of current as said ambient temperature increases.

Claim 12. (Previously Presented) The charge characteristic compensating circuit of claim 11, wherein said current controller includes said thermistor.

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Claim 13. (Original) The charge characteristic compensating circuit of claim 12, wherein said thermistor is a positive temperature coefficient thermistor.

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Claim 14. (Previously Presented) The charge characteristic compensating circuit of claim 13, wherein said current controller further includes said resistor such that said resistor is in one of a parallel connection or a serial connection with said thermistor.

Claim 15. (Original) The charge characteristic compensating circuit of claim 9, wherein said gate line controller is a voltage divider such that said controlling signal received by said gate line driver includes a voltage, a level of which varies as said ambient temperature varies.

Claim 16. (Original) The charge characteristic compensating circuit of claim 15, wherein said voltage divider decreases said voltage as said ambient temperature increases.

Claim 17. (Previously Presented) The charge characteristic compensating circuit of claim 16, wherein said voltage divider includes said thermistor.

Claim 18. (Original) The charge characteristic compensating circuit of claim 17, wherein said thermistor is a negative temperature coefficient thermistor.

Claim 19. (Previously Presented) The charge characteristic compensating circuit of claim 18, wherein said voltage divider further includes said resistor such that said resistor is connected between said voltage converter and an input to said gate line driver and said negative temperature coefficient thermistor is connected between ground and said input to said gate line driver.

Claim 20. (Currently Amended) The charge characteristic compensating circuit of claim 18, wherein said voltage divider further includes a positive temperature coefficient thermistor such

that said positive temperature coefficient thermistor is connected between said voltage converter and an input to said ~~said~~ gate line driver and said negative temperature coefficient thermistor is connected between ground and said input to said gate line driver.

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Claim 21. (Currently Amended) The charge characteristic compensating circuit of claim 16, wherein said voltage divider includes a positive temperature coefficient thermistor such that said positive temperature coefficient thermistor is connected between said voltage converter and an input to said ~~said~~ gate line driver and a resistor such that said resistor is connected between ground and said input to said gate line driver.

Claim 22. (Currently Amended) A method to compensate for a charge characteristic of a liquid crystal display panel (LCD), comprising:

supplying a controlling signal that varies by way of a resistor and a thermistor as an ambient temperature varies; and
supplying a predetermined voltage to a gate line driving a
gate line according to said controlling signal to drive the gate
line.

Claim 23. (Currently Amended) The method of claim 22, wherein said controlling signal includes an electrical current, an amount of which varies as said ambient temperature varies.

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Claim 24. (Original) The method of claim 23, wherein said amount of current is decreased as said ambient temperature increases.

Claim 25. (Currently Amended) The method of claim 22, wherein said controlling signal includes ~~includes~~ a voltage, a level of which varies as said ambient temperature varies.

Claim 26. (Currently Amended) The method of claim 25, wherein said voltage is decreased as said ambient temperature increases.
